

## SEVEARITY INDEX OF POILCE STRESS IN GUJARAT: AN ANALYSIS OF MENTAL SYMPTOMS OF STRESS AMONG SELECTED POLICE PERSONNEL

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### ABSTRACT

Police Personnel of Gujarat are suffering from stress as quoted by the author himself in his previous research work in 2012. In this fast growing, globally competitive and Hi-Tech Arena it is important to check the severity of police stress. Treatment and best fitted coping strategies largely depends on the severity of stress. This study makes an attempt to check the severity of mental symptoms of stress among selected police personnel of Gujarat.

The response were collected on a 5-point Likert scale which best fits in qualitative ranking but difficult to quantify exactly and differentiate the degree of response to find out the level of stress. For that purpose, the original response (5-point Scale) of the respondents have been converted into three quantitative categories by assigning a Zero to very low and low, One to moderate and Two for high and very high degree of response and the summation of these scores is termed as Severity Index (SI) of the respondents response to stress.

The study makes an attempt to categorize the mental symptoms of stress into three categories i.e. High, Moderate and Low on the basis of severity and to check the severity with different demographic components.

**KEYWORDS:** Stress, Symptoms of Stress, Gujarat Police, Mental Symptoms, Severity Index, Treatment and Coping Strategy

### INTRODUCTION

Stress may be understood as a state of tension experienced by individuals facing extraordinary demands, constraints or opportunities. The pressures of modern life, coupled with the demands of a job, can lead to emotional imbalances that are collectively labeled 'Stress'. However, stress is not always unpleasant. Stress is the spice of life and the absence of stress makes life dull, monotonous and spiritless. Police personnel are often termed as authoritarian, cynical, psychopathological, rude and submissive. On the other hand, they are said to be responsible, determined and dedicated. People have conflicting stereotypes for personality traits of police.

Gujarat police have been quite satisfactory in keeping their objectives aimed at total peace for the state. The role and the need of the police in times of emergency is remarkable at the national level, in general. But in particular, they are the messengers of God during natural disasters for the people of Gujarat. Even in handling criminal cases, they are amazing at pointing and striking out the problems.

With recent attention on police suicide, a number of cases have been reported in the media and studies carried out, review of these cases and studies indicate that one of the reasons of police suicide is the high level of stress. Between 1934 and 1960, police suicide rates were half that of the general population. Between 1980 to the present, suicide rates in some

departments almost approach double. Reviews and research finding showed that the main reason behind the police suicide was a high level of stress. In recent times, the police stress has increased alarmingly, so there is a need to identify the reasons behind the growing stress level among police personnel in Gujarat.

The author has classified symptoms of police stress into three broad categories Mental, physical and other symptoms of stress. Among the three only mental symptoms of stress has been considered for this particular study. To measure the mental symptoms of stress following attributes have been identified by the author. Anxious, Worry A Lot, Irritability, Easily Frustrated, Aggressive Outbursts, Poor Concentration, Forgetfulness, Depression, Poor motivation, Want to be alone always, Poor Self-esteem and Feel out-of-control.

The main problem have been observed by the author is that a number of study have been done on police stress in past at national regional and even international level. They have identified the symptoms of stress, sources of stress and their coping strategies without identifying the severity of symptoms of stress. Without severity of various symptoms it becomes very difficult to suggest some treatment and coping strategies. With this view this paper makes an attempt to check the severity of mental symptoms of stress keeping in mind the following objectives.

### **OBJECTIVES OF THE STUDY**

- To check the severity index of mental symptoms of stress among selected police personnel of Gujarat.
- To check the impact of mental symptoms of stress with different demographic components of police personnel of Gujarat.
- Depending upon the severity make suggestion and recommendation regarding level of treatments and the coping strategies.

### **HYPOTHESIS OF THE STUDY**

- **H0<sub>1</sub>:** There is no significant relationship between Smoking / Tobacco and level of stress among police personnel of Gujarat.
- **H0<sub>2</sub>:** There is no strong association between consumption of drug, alcohol and level of stress among police personnel of Gujarat
- **H0<sub>3</sub>:** There is no relationship between Depression and Stress among police personnel of Gujarat
- **H0<sub>4</sub>:** There is no correlation between level of stress and level of anger (short temper) among police personnel of Gujarat
- **H0<sub>5</sub>:** There is no significant relationship between gender and Stress among police personnel in Gujarat.
- **H0<sub>6</sub>:** Factors determining stress level of respondents are independent of their age among police personnel of Gujarat
- **H0<sub>7</sub>:** Level of Stress is Independent of Number of Cigarette Smoked among police personnel of Gujarat
- **H0<sub>8</sub>:** Level of Stress is Independent of Marital Status of Respondents among police personnel of Gujarat

## REVIEW OF LITERATURE

Martin Gächter, David A. Savage and Benno Torgler; October (2009) Authors tried to analyse the effect of gender on reported and perceived levels of stress through examination of both the physical and psychological indicators. They found it interesting to work with police data due to high stress levels among police officers and the fact that the work environment is male dominant (females are a minority). They had tried we not only explore gender differences, but also whether job and private environmental factors such as effective cooperation between units, a higher trust in the work partner, a higher level of work-life-balance and home stability, and a higher level of interactional fairness, affect female and male officers differently. With the help of multivariate regression analysis of police officers, they found that female officers were significantly suffering from physical stress indicators than their male counterparts. No gender differences were observed in regards to psychological stress. Study had also reported that a higher level of trust, cooperation and a higher level of interactional fairness at work were not able to absorb physical stress among female, where as these factors had strong impact on male officers.

Bushara Bano & Parvaiz Talib (2012) The paper analyses the concept of police personality. The paper investigates on the basis of qualitative research whether personality of police is same as other non-police persons or they possess different personality profiles. The paper also critically analyses the contribution of predispositional and socialization factors in the development of working personality within police population. The findings reveal that the phenomenon is not well investigated by the existing studies. The paper suggests the researchers to investigate the concept of police personality more extensively as the available data is ambiguous in nature.

### Research Gap

Research Gap has been divided into two categories, first, on the basis of time duration and the second on the basis of geographic location. Beyond this, a minor model modification has also been done in this study.

### Periodical

Pestonjee (1992) - in his compendium of stress research in India noted that there are only two studies on police professionals. Bushra Banoo (2012) pointed out that only few researches have been conducted on Indian police. This study makes an attempt to fill the periodical gap which is pointed by the expert in this area.

### Regional

At the global level, a number of studies have been conducted in the past on police stress but in Indian scenario very few systematic studies on police stress have been noticed. In depth study on the topic of stress among police personnel in Gujarat is yet to be carried out in a more scientific and advanced manner.

## RESEARCH METHODOLOGY

Close ended structured Questionnaire have been used to collect the responses from the selected police personnel of Gujarat. Total twelve attributes have been identified to measure the mental symptoms of stress like Anxious, Worry A Lot, Irritability, Easily Frustrated, Aggressive Outbursts, Poor Concentration, Forgetfulness, Depression, Poor motivation, Want to be alone always, Poor Self-esteem and Feel out-of-control. The research design for this study is a combination of descriptive and analytical in nature. Multistage sampling with a combination of stratified and convenience sampling techniques have been used to estimate sample size. The sample size of this study was 1291 police personnel of Gujarat

state. The coverage of the study was limited to four cities of Gujarat i.e. Ahmadabad, Vadodara, Rajkot and Surat. SPSS version 20 have been used to analyze the data with the use of various statistical methods like Measure of Central tendency, Measure of Variability, Reliability Test, Student “T” test, Chi Square test, Correlation and Regression analysis, testing of hypothesis. Unit of Analysis for this study was individual and group in nature.

## **ANALYSIS & INTERPRETATION**

### **Demographic Profile**

Demographic Profile of the respondents indicate that almost 75% of the respondents are 35 years of age or less while 36 years or above contains only 25% of the respondents. The maximum numbers of respondents were in the age range of 25 – 30 years while the minimum respondents fell between 58 and above or retired police personnel. The respondent’s age breakup shows that the analysis and outcome of the study mainly depend on the perception and experience of the younger police personal. 25% respondents are 25 years of age or below while the last 25% of the respondents are 36 years of age and above, rest of the 50% respondents are within the age group of 25 – 35 years. The analysis of data confirms the gender bias towards police force as far as the total respondents are concerned.

Female police personnel (2.9%) are less in comparison to male police personnel (97.1%). Level of education among the respondents shows unequal distribution as was expected. In the police force recruitment, education is not considered a major criterion for the new entrant. 82% respondents were graduates or below while the post graduate and others had only 18% respondents which confirm that majority of the police personnel were not highly educated. The religion of the respondents is highly skewed towards Hinduism as it was expected because the contribution of Muslims and Christians in Indian police force was negligible and the Sikhs are more inclined towards military and paramilitary. Caste category of the respondents shows an equally proportionate distribution as per their division in general population pattern. The outcomes confirm that the contribution of Schedule Tribe (8.1%) in this study is very low as compared to the General category (40.5%) of police personnel.

The places of residence of the respondents are divided into three categories i.e. Urban, Semi Urban (Town) and Rural (Village). More than half of the respondents reside in urban (59.3%) areas while 22% police personnel live rural areas. Rest of the respondents (19%) resides in semi urban (Town) areas. Out of total respondents, 73% are married while 22% are unmarried and 3% are divorced. 579 respondents are those who don’t have any dependent member on them whereas 225 and 215 respondents are such who have one and two dependents on them respectively. Number of dependents is inversely related with the number of respondents. Out of total respondents 859 (66%) of the respondents are posted in urban police stations followed by semi urban (town) (17%), Rural (village) (14%) and outpost (3%) only.

Police Chowki and Police Station are two different units of posting where police Chowki is a subset of police station of that area. Among the total (1291) respondents, 87% are currently posted in police stations, where as only 13% are posted at police Chowki. In this study, rank of the police force has been divided into four categories. The Lowest category of the police force comprises of PSI, Jamadar, Head-Constable and Constable; 84% respondents belong to that category. The highest category comprises of DG, Add. DG, IG, Spl. IG, DIG and only 0.2% respondents belonged to this category. As they hold the top position, their responsibilities are higher than the other categories so they don’t have enough time to respond. The Experience of the respondents is divided into seven categories. Out of total respondents 49% are having experience up to 5 years where as 28%, 12% and 5% respondents belongs to 6-10 years, 11-15 years and 16-20 years of experience respectively. The 9 respondents out of total have 30 years or more experience. The income of the

respondents are divided into five category namely up to 1, 00,000, 1.0-2.25 lakhs, 2.25-3.0, 3.0 – 5.0 and 5 lakhs and above. The majority of the respondents fall in the lower category of income and a few numbers of respondents fall into the higher category of income. The number of family members in police department is inversely related the number of respondents. The summary of the above table confirms that the majority of the respondents are young in age, means they are new entrants that validate the marital status of the respondents. Further, the marital status of the respondents validates the number of dependents of the respondents. Low income and less experience are also being validated with the age of the respondents.

### Severity Index

The study essentially focuses on those respondents who have reported moderate, high and a very high level of stress and survives in a stressful situation which leads to various problems in their personal and professional life. The response were collected on a 5-point Likert scale which best fits in qualitative ranking but difficult to quantify exactly and differentiate the degree of response to find out the level of stress. For that purpose, the original response (5-point Scale) of the respondents have been converted into three quantitative categories by assigning a Zero to very low and low, One to moderate and Two for high and very high degree of response and the summation of these scores is termed as Severity Index (SI) of the respondents response to stress.]

**Table 1**

Age in Years		SIMSS
Below 25	Mean	5.6137
	N	321
	Std. Deviation	6.04155
25 -30	Mean	5.6095
	N	461
	Std. Deviation	6.18514
31 -35	Mean	8.6033
	N	184
	Std. Deviation	6.08503
36 – 40	Mean	9.4561
	N	114
	Std. Deviation	5.90056
41 -45	Mean	12.1714
	N	70
	Std. Deviation	5.62338
46 – 50	Mean	12.0260
	N	77
	Std. Deviation	5.44584
51 -58	Mean	7.8750
	N	56
	Std. Deviation	6.31035
58 & above (Retd.)	Mean	6.6250
	N	8
	Std. Deviation	6.36817
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

The severity index of mental symptoms of stress shows that the mean are varied in the category of age. The average severity index of mental symptoms of stress is 7.22 out of 24 which indicates that 30% mental symptoms of stress were observed in the sample of the study. The respondents belong to the age group of 31-35 to 51-58 and have a higher mean than the sample mean with a maximum mean of 12.17 in the age group of 41-45 and a minimum mean of 5.609 in the age group of 25-30. A total of 501 (38.8%) respondents have more than 30% (Average) of mental symptoms of stress out of which 147 respondents reported more than 50% of mental symptoms of stress and belonged to the age group of 41-45 and 46-50.

**Table 2**

<b>Gender</b>		<b>SIMSS</b>
Male	Mean	7.2648
	N	1254
	Std. Deviation	6.47853
Female	Mean	5.7027
	N	37
	Std. Deviation	4.37077
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

The Severity Index among gender is higher than the sample mean for male and lower in the female category in all the variables under study except practicing coping strategies for stress. The general perception of the society is that females are more conscious and sensible towards their mental and physical health which has been confirmed from the practice of coping strategies for stress in this study.

**Table 3**

<b>Qualification</b>		<b>SIMSS</b>
up to HSC	Mean	11.2655
	N	339
	Std. Deviation	5.26575
Graduate	Mean	5.4030
	N	722
	Std. Deviation	6.05931
Post graduate	Mean	6.7123
	N	219
	Std. Deviation	6.36247
Others	Mean	11.9091
	N	11
	Std. Deviation	6.83307
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

The severity index of mental symptoms of stress shows that the mean are varied among the categories of educational qualification. The respondents with educational qualification up to HSC and Others have a severity index of mental symptoms of stress higher than the sample mean. A total 350 i.e., (27%) of the respondents have more than above average mental symptoms of stress. The same trend has been observed in the majority of the variables under study.

**Table 4**

Religion		SIMSS
Hindu	Mean	7.3297
	N	1183
	Std. Deviation	6.46096
Muslim	Mean	5.6517
	N	89
	Std. Deviation	5.35151
Sikh	Mean	2.4286
	N	7
	Std. Deviation	6.42540
Christian	Mean	10.8333
	N	12
	Std. Deviation	8.00946
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

More than 90% of the respondents belonged to the Hindu religion; it was observed that the severity index is higher than the sample mean among variables under study. The number of respondents from other religion is very less but still the study has taken into consideration and found that the severity index for variables in the study among Christians is higher than the sample mean while the inverse trend has been found in Sikh religion.

**Table 5**

Place of Residence		SIMSS
Urban	Mean	6.6876
	N	765
	Std. Deviation	6.52967
Town	Mean	7.0041
	N	243
	Std. Deviation	5.71463
Rural Village	Mean	8.8445
	N	283
	Std. Deviation	6.49963
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

The general perception of the society towards urban area is that the standard of living and access to various amenities and technologies are high as compared to the town and village. The access amenities and technologies are considered as two edged sword which either cause the comfort or discomfort in the various sections of the society. The study found that among the urban respondents, the severity index of all the variables is lower than the sample mean. When studying the town and village respondents, it was noticed that the respondents belonging to the village have a higher value of severity index than the respondents belonging to the town. The respondents living in rural areas (village) are more prone to practicing coping strategies than the respondents living in town (semi-urban areas).

**Table 6**

<b>Marital Status</b>		<b>SIMSS</b>
Married	Mean	7.0539
	N	947
	Std. Deviation	6.48239
Unmarried	Mean	6.9100
	N	289
	Std. Deviation	6.17557
Divorced	Mean	11.5750
	N	40
	Std. Deviation	5.74183
Others	Mean	12.0667
	N	15
	Std. Deviation	3.57505
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

The severity index of mental symptoms of stress shows that the mean are varied among the categories of marital status. The Severity of mental symptoms are high among the other category which include the married but separated and having some kind of dispute in post marital status followed by the divorcee and the least severity have been observed in unmarried category.

**Table 7**

<b>Rank in the Police Force</b>		<b>SIMSS</b>
DG, ADG, IG,SPL, IG, DIG	Mean	5.3333
	N	3
	Std. Deviation	6.65833
DSP/DCP, DYSP/ACP	Mean	6.2394
	N	71
	Std. Deviation	6.46411
PI	Mean	7.6667
	N	126
	Std. Deviation	6.25204
PSI, JAMADAR,HEAD CONSTABLE, CONSTABLE	Mean	7.2374
	N	1091
	Std. Deviation	6.45105
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

The severity index of mental symptoms of stress shows that the mean are varied among the categories of rank in the police force. The outcome of the analysis indicates that mental symptoms are high among the lower rank (PI and below) and comparatively low in the upper category (DCP and Above).



**Table 8**

Experience		SIMSS
UP TO 5	Mean	6.0109
	N	641
	Std. Deviation	5.99413
6 -10	Mean	7.6444
	N	360
	Std. Deviation	6.82705
11 – 15	Mean	10.1203
	N	158
	Std. Deviation	6.15858
16 – 20	Mean	9.0635
	N	63
	Std. Deviation	7.32180
21 – 25	Mean	8.6667
	N	30
	Std. Deviation	6.01340
26 -30	Mean	7.4000
	N	30
	Std. Deviation	3.63508
Above 30	Mean	7.1111
	N	9
	Std. Deviation	6.31357
<b>Total</b>	<b>Mean</b>	<b>7.2200</b>
	<b>N</b>	<b>1291</b>
	<b>Std. Deviation</b>	<b>6.43184</b>

The severity index of mental symptoms of stress shows that the mean are varied among the categories of experience. New entrants having a trend of low level of mental symptoms of stress while police personnel having experience in between 10 – 30 years have very high level of mental symptoms of stress while having more than 30 years of experience are having low level of mental symptoms of stress.

**Table 9: Testing of Hypothesis & Results**

Sr. No.	Hypothesis	Variables		Beta Value	T Value	P Value	Decision
		Independent	Dependent				
H0 <sub>1</sub>	There is no significant relationship between Smoking/ Tobacco and level of stress.	Smoking/ Tobacco	Level of Stress	-.098	-3.516	.000	Reject
H0 <sub>2</sub>	There is no strong association between consumption of drug, alcohol and level of stress.	Consumption of drug & Alcohol	Level of Stress	.727	38.008	.000	Reject
H0 <sub>3</sub>	There is no relationship between Depression and Stress.	Depression	Stress	.729	38.187	.000	Reject
H0 <sub>4</sub>	There is no correlation between level of stress and level of anger (short temper).	Level of Anger (Short Temper)	Level of Stress	.586	25.945	.000	Reject
H0 <sub>5</sub>	There is no significant relationship between gender and Stress among police personnel in Gujarat.	Gender	Level of Stress	-.054	1.960	.050	Accept
H0 <sub>6</sub>	Factors determining stress level of respondents are independent of their age.	Age	Level of Stress	0.253	9.375	.000	Reject
H0 <sub>7</sub>	Level of Stress is Independent of Number of Cigarette Smoked	Number of Cigarette Smoke	Level of Stress	-0.096	-1.352	.178	Accept
H0 <sub>8</sub>	Level of Stress is Independent of Marital Status of Respondents	Marital Status of Respondents	Level of Stress	.110	3.988	.000	Reject

## CONCLUSIONS

The study had examined the mental symptoms of stress among police personnel of Gujarat state. The conclusions of the study emphasized that as far as mental symptoms of stress are concern, it has been concluded that, there is a positive mental symptoms of stress among police personnel of Gujarat state. The study had also found that the police personnel of Gujarat have been suffering from the stress irrespective of their designations and ranks in police organizations.

In a concluding remark it has been pointed out that police personnel of Gujarat state have been found stressful with varying level of stress. Low level of symptoms of stress indicates that stress among the police personnel is not matured enough and has not reach to a critical level. Whereas the sources of stress is higher than the symptoms of stress, it means if sources will not be controlled on a war footing, it leads to the symptoms of stress into a critical situation which might create a very difficult situations for appropriate authorities to handle it on a mass level.

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